

REMARKS

After entry of the foregoing amendment, claims 1, 4, 7-11, and 13-28 are pending in the application.

To expedite prosecution and narrow the issues, claims 2 and 3 have been canceled. Claim 1 has been amended to incorporate limitations similar to those earlier found in claims 2 and 3.

Similarly, claims 5 and 6 have been canceled, and claim 4 has been rewritten to include their limitations.

Likewise with canceled claim 12, the limitations of which have now been incorporated into claim 11.

(Applicant may pursue original claims 1, 4 and 11 in a related application.)

Claims 25-28 are newly added.

Claims 1-20 and 24 were rejected as anticipated by Roese (20030217122).

Amended claim 1 is believed properly allowable over Roese.

The amended claim 1 requires, *inter alia*, that “one or more flag bits are related to the payload *of a watermark in the content.*” Roese does not teach such limitation.

The specification of the present application incorporates by reference (at paragraph [0064]) the disclosures of two commonly-owned applications: 20020162118 and 20020186844. About watermarks the former publication explains, *e.g.*:

[0007] Much work has been done in recent years in the field of video digital watermarking--the science of conveying data through slight changes to the video information presented to the viewer ("in-band"). The changes are preferably slight as to be imperceptible to the viewer, yet can be recovered by suitable signal processing. Illustrative techniques are shown in the assignee's U.S. Pat. No. 6,122,403 and U.S. application Ser. Nos. 09/138,061 and 09/164,859, and in patent documents WO99/45705, WO 00/04722, each of which are hereby incorporated by reference. Of course, other techniques can be used to steganographically embed data within a video signal. Such embedding techniques are suitably interchangeable with the present invention.

The latter publication explains, *e.g.*:

[0006] Digital watermarking is the science of encoding physical and electronic objects with plural-bit digital data, in such a manner that the data is essentially hidden from human perception, yet can be recovered by computer analysis. Most commonly, digital

watermarking is applied to media such as images, audio signals, and video signals. However, it may also be applied to other types of data, including documents (e.g., through line, word or character shifting), software, multi-dimensional graphics models, and surface textures of objects. In physical objects, the data may be encoded in the form of surface texturing, or printing. Such marking can be detected from optical scan data, e.g., from a scanner, optical reader, input device, digital camera, or web cam. In electronic media (e.g., digital audio or imagery--including video), the data may be encoded as slight variations in sample values. Or if the media is represented in a so-called orthogonal domain (also termed "non-perceptual," e.g., MPEG, DCT, wavelet, etc.), the data may be encoded as slight variations in quantization values or levels. The assignee's U.S. Pat. Nos. 5,862,260 and 6,122,403, and U.S. application Ser. No. 09/503,881, filed Feb. 14, 2000, are illustrative of certain digital watermarking technologies. Each of these U.S. patent documents is herein incorporated by reference. A great many other approaches are familiar to those skilled in the art. The artisan is presumed to be familiar with the full range of literature about steganography, data hiding and digital watermarking.

The Office Action, on page 3, interprets Roese to meet the "watermark" limitation as follows:

"[0117] states that the data itself that is transmitted can contain authentication rules on itself, thus the body data can contain watermark information."

However, there is no teaching in Roese [0117] of authentication rules that are in the form of a watermark. (Moreover, there does not appear to be any reference in [0117] to authentication or rules.)

Accordingly, amended claim 1 is believed properly allowable over the art.

Amended claim 4 is likewise believed to be allowable.

The amended claim 4 requires, *inter alia*, that "said domain comprises networked devices *associated with a single family*." Roese does not teach such limitation.

The Action cites paragraphs [0098] – [0099] as meeting this requirement. However, the cited excerpts do not appear to have any disclosure anticipating such claim limitation.

Accordingly, amended claim 4 is believed properly allowable over the art.

Amended claim 11 is also believed to be allowable.

The amended claim 11 requires that if additional data in the packet header has a first state, transmission of a copy of the data to *any* second destination address is to be

prohibited. (If it has a second state, transmission to only *certain* destination addresses is prohibited.) Roese is not understood to teach the former limitation.

The Action cites paragraph [0115] – [0118] as meeting this requirement. However, that passage is understood to contemplate a different arrangement.

In Roese’s arrangement, if his “tag” has one state, then transmission to certain destination addresses is prohibited (per his location restrictions). But if it has another state, then there is understood to be *no* transmission prohibitions.

Roese is not understood to teach packet header data prohibiting transmission to *any* destination address.

Accordingly, amended claim 11 is believed properly allowable over the art.

(Amended claim 4 includes a similar limitation.)

Claim 19 is also believed to be allowable.

Claim 19 requires obtaining an identifier of the content, and including the content identifier in the second portion of each packet.

Claim 19 is rejected by reference to claims 2 and 4. However, neither claim 2 nor 4 included any limitation relating to a “content identifier,” nor its inclusion in the second portion of each packet. Roese is not understood to teach such limitations.

Accordingly, claim 19 is believed properly allowable over the art.

Claims 20-24 are believed allowable for their dependence from claim 19. Additionally, it appears that the Office may have misread Moskowitz (7,287,275). The Action states that Moskowitz’s header:

“contains watermark information for identifying the content and authentication of the packet and content for transmission (col. 4, lines 55-57).”¹

However, the cited passage of Moskowitz states only:

Optionally, the packet watermark may include a unique identifier associated with the watermark packet key, and/or a hash output for a portion of the stream of data.

¹ Office Action, page 8, lines 10-12.

This passage does not teach a *content identifier*, as required by claim 21.

Claims 25-28 are newly presented, and are particularly drawn to a method of deterring unauthorized redistribution of video entertainment from a consumer's home network, as detailed, e.g., at paragraphs [0006] and [0056] – [0084] of applicant's specification. Roese is not understood to teach or suggest an arrangement like that detailed in the new claims.

For brevity's sake, these remarks have only addressed certain of the claims, and have detailed only certain of the distinctions between the claims and the art. However, such discussion is believed sufficient to establish the allowability of all pending claims. Thus, applicant does not further belabor this paper with other arguments concerning the rejections, the art, and the claims – all of which are reserved for possible presentation.

At about the time the Office issued the November 28 Action, Applicant submitted an Information Disclosure Statement. Consideration of this IDS, and return of the initialed Form PTO-1449 to the undersigned with the next communication, are requested.

Respectfully submitted,

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